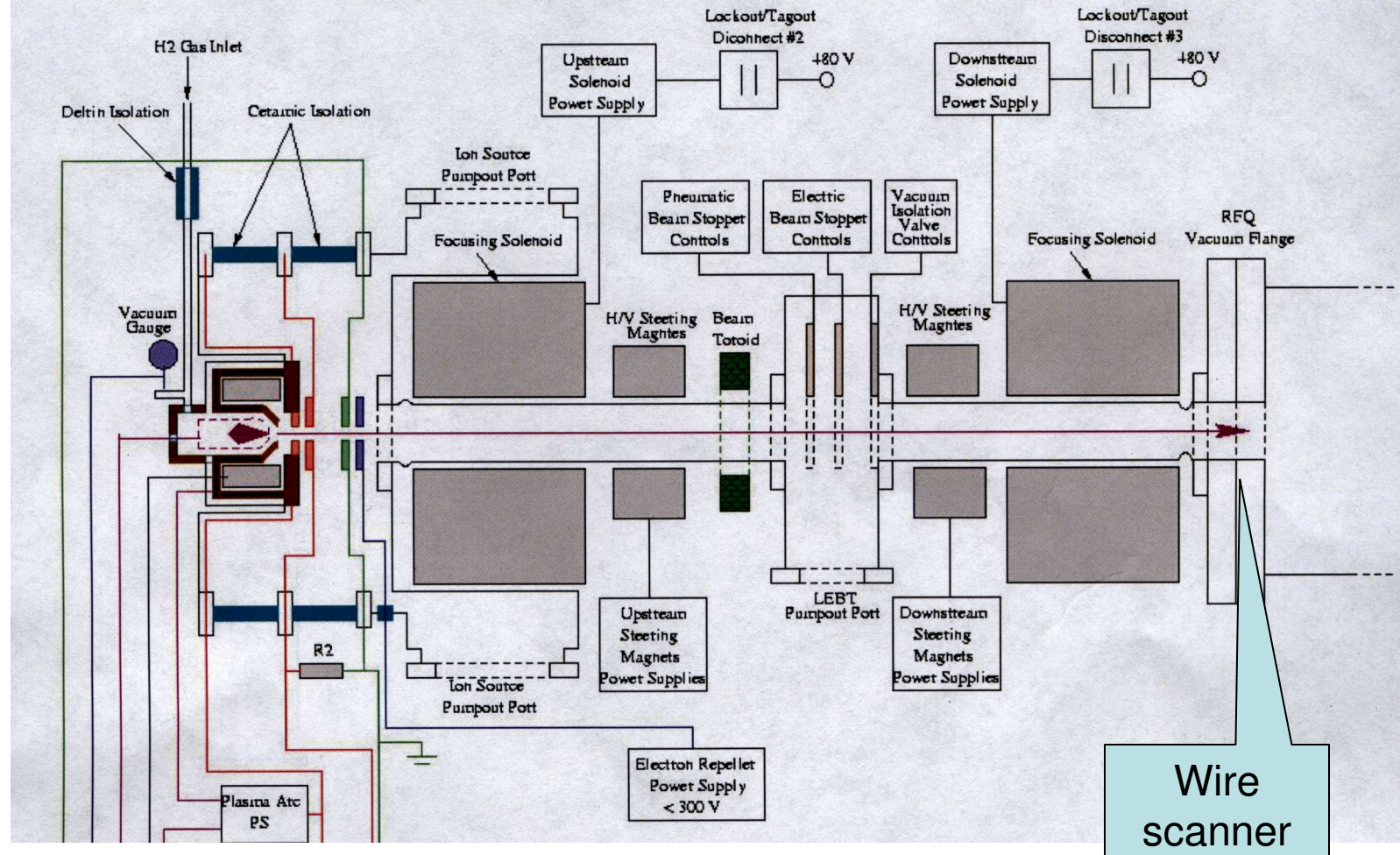


Test for emittance measurements with wire scanner

Gennady Romanov

October 23, 2008

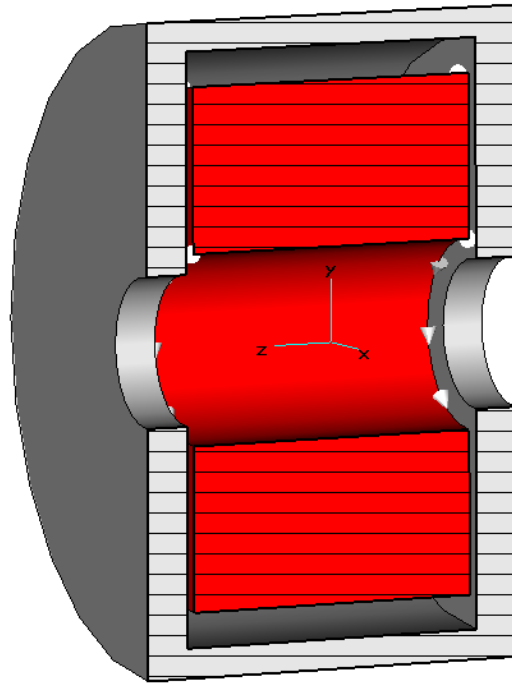
PROTON SOURCE and LEBT ARRANGEMENT



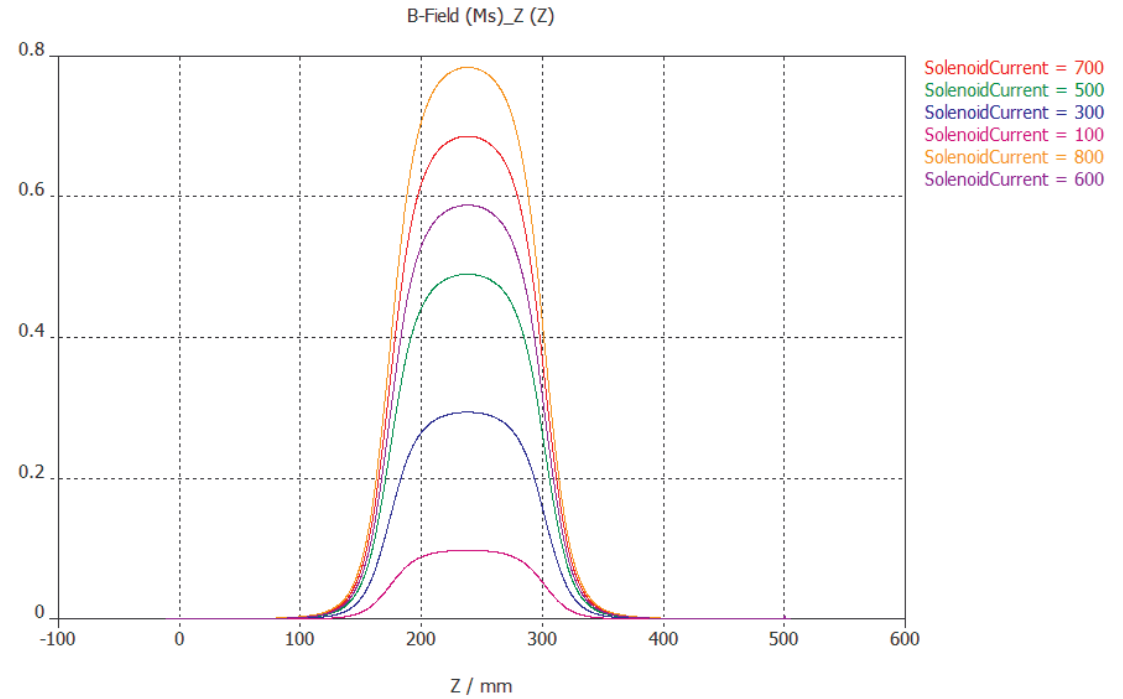
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LEBT solenoid

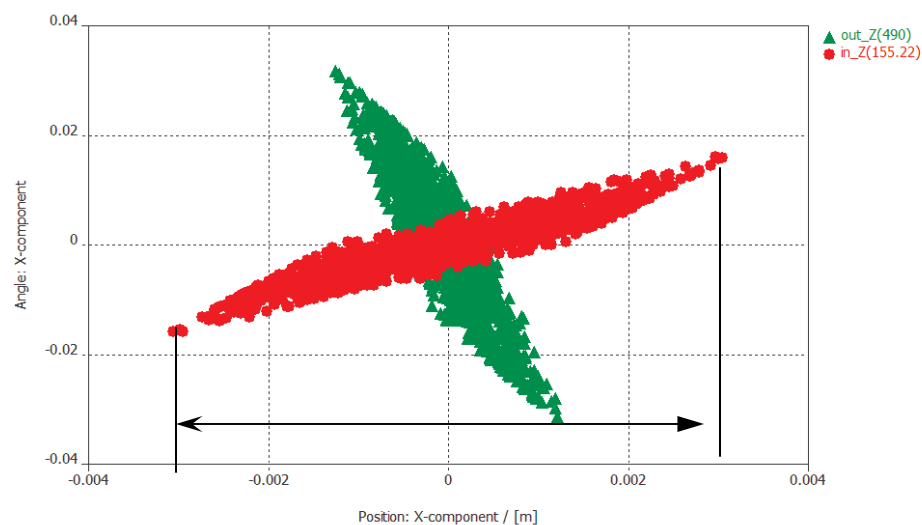
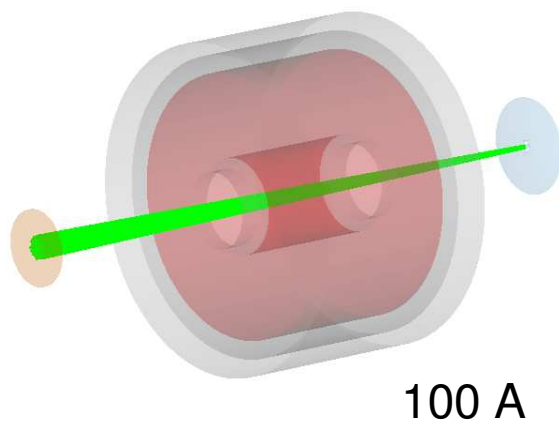
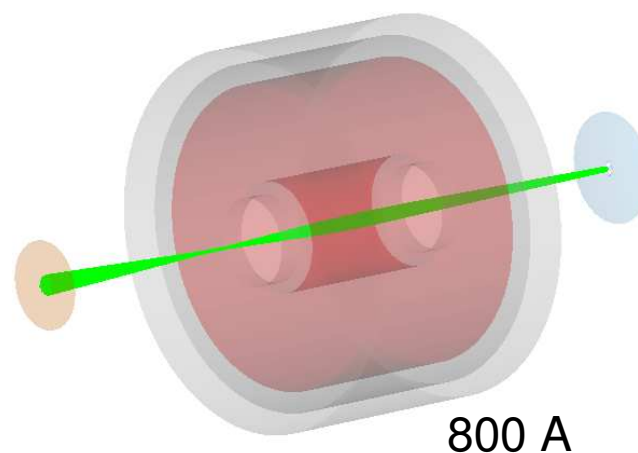
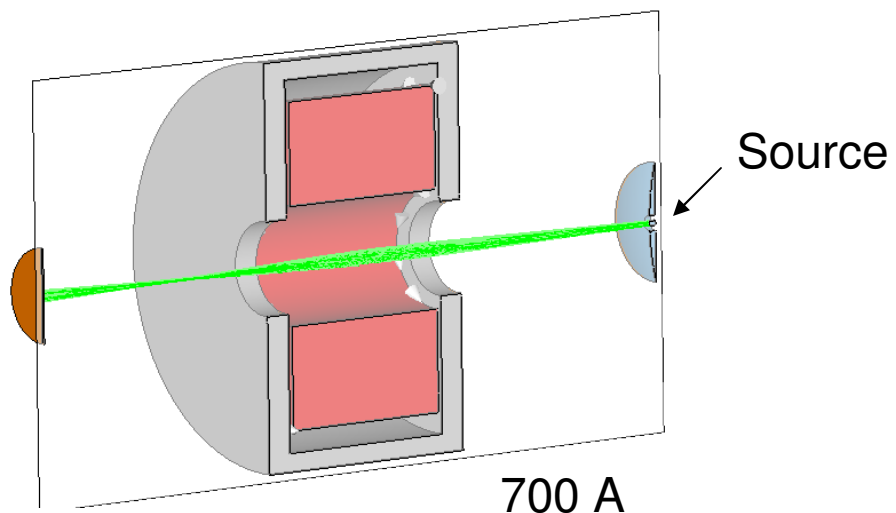


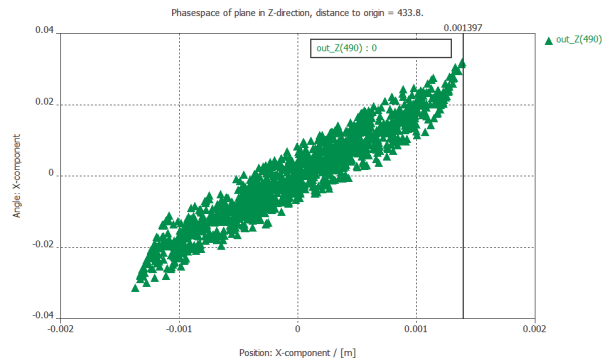
Steel AISI 1010



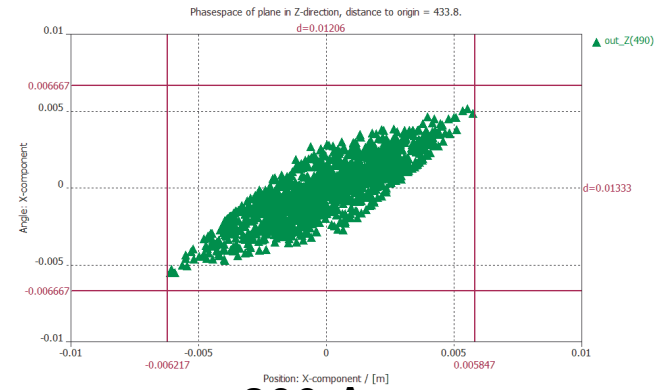
$I=730$ A, 100 turns,
 $B_{\max}=0.72$ T = 7.2 kGs
(6.9 kGs in experiment)

Test scheme. No current, no scattering over energies etc





700 A



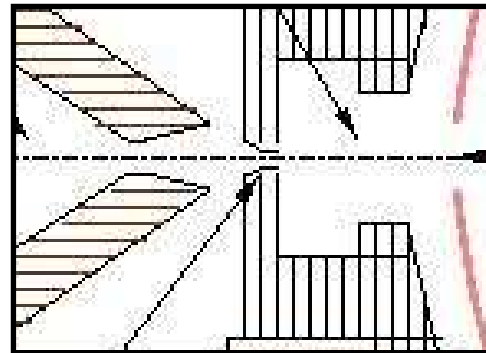
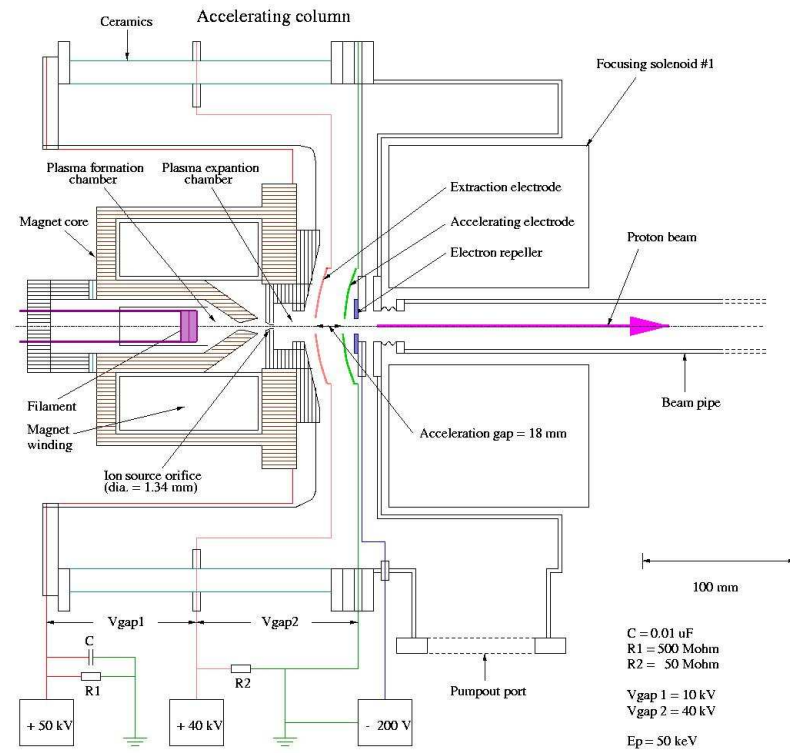
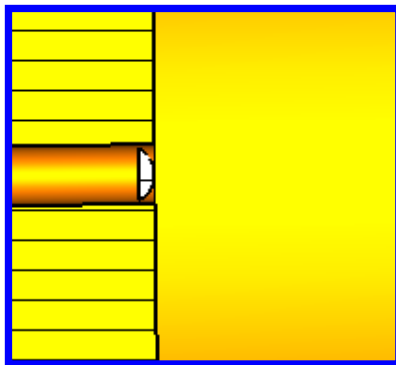
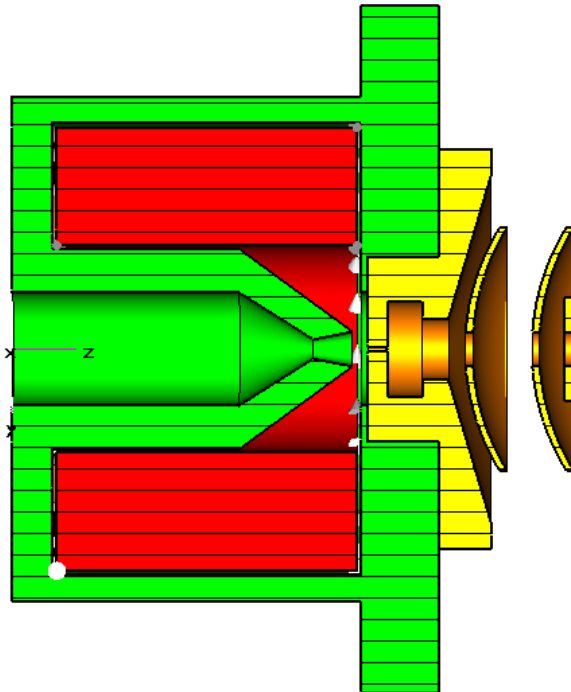
300 A



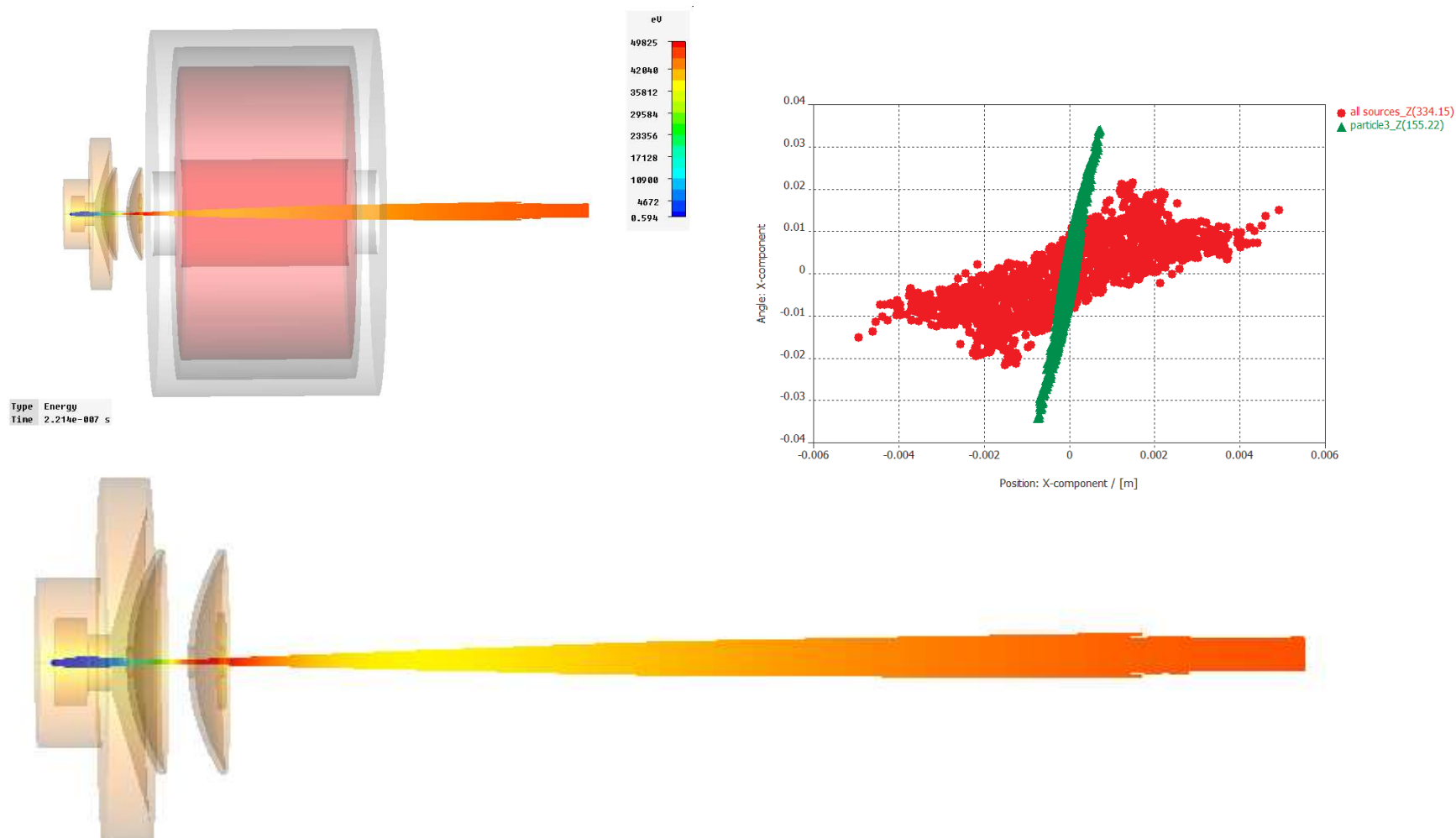
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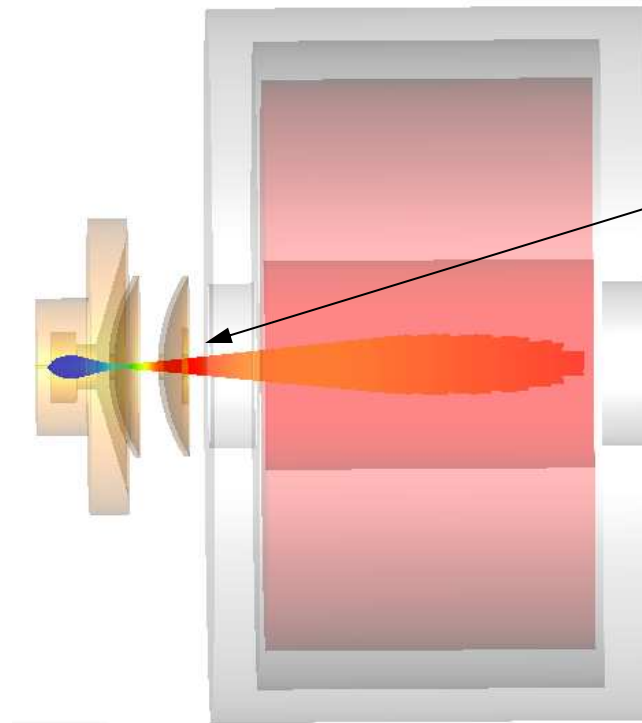
Simulation of ion source



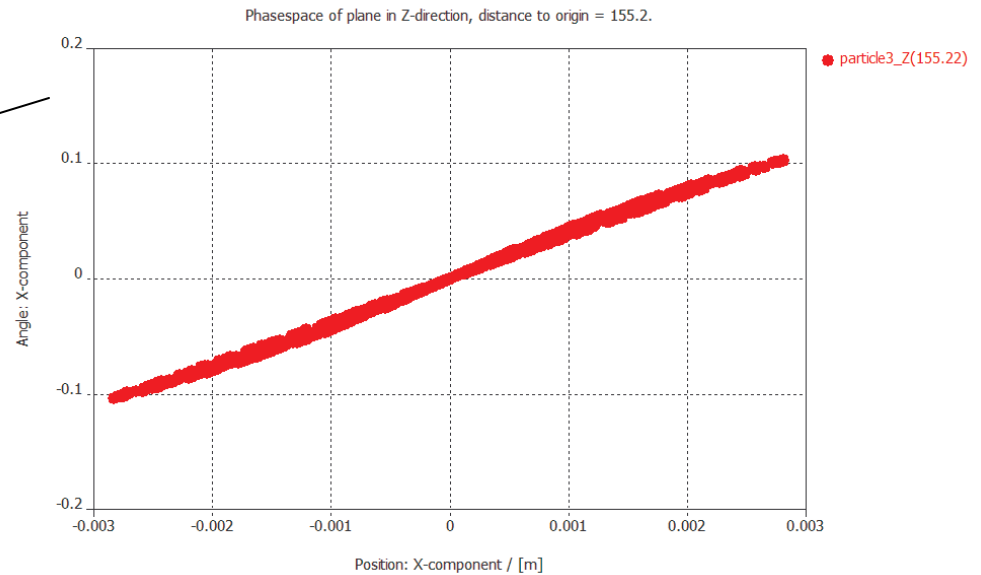
Simulation of LEBT. $I = 0$.



Simulation of LEBT. $I = 0.1$ mA (density?)



Energy
 5.1×10^{-7} s



Two TB of hard disk memory are needed to proceed